



**220 South Union Street
Construction Update
September 8, 2015**



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Progress Summary

- Preconstruction photographic and settlement surveys completed.
- Utility test pits completed and existing services disconnected.
- Sawcutting for the new electrical ductbank completed.
- Demolition of 220 S. Union Street warehouse completed.
 - 32,500-gallons of water used in first 4.5 days for dust control during demolition.
 - 8,000-gallon daily water consumption average.
- Disposal of the concrete slab is underway for completion this week.
 - Use of excavator and sawcut operator
- Archeological monitoring has started.
 - Thunderbird Archeology is monitoring
- The first phase of dewatering well points have been installed.

Look-Ahead

September 7th – 11th:

- Removal of the building slab via excavator and sawcutter.
- Initial dewatering drawdown and placement of well points at Duke Street.
- Start excavation with archeological trenching to level the site to the Strand Street elevation.
- Electrical utility work from South Union east on Duke Street

September 14th – 18th:

- Site utility work will continue within Duke Street and Strand Street.
- Continue leveling the site with archeological monitoring.
- Demolition of the 210 Strand Street warehouse.

The current utility work will continue through September ahead of work by the power company to remove overhead electrical lines.



Hauling

Vehicle weights are restricted by Virginia DMV (the Motor Vehicle Code of Virginia).

- Haul Route signage has been posted
 - Inbound: via Franklin
 - Outbound: via Gibbon
- Coordinated with T&ES for arrow markings and “Truck Route” indicators.
- The City has posted an informational Waterfront Construction Haul Route sign with a toll free number.
- The truck dispatcher has instructions only to provide drivers agreeing to follow the route and cover loads.
- Drivers found deviating from the route or not covering loads are dismissed.



Construction Parking

- All contracts state that per “direction from the City of Alexandria, no construction worker parking will be allowed on streets in the area of the project.”
- Parking rules are reiterated to every individual worker and consultant during their safety orientation prior to physically working onsite.
- To-date, workers have parked within the project limits – behind the fence and on the warehouse slab.
- The utility and dewatering subcontractors – Flippo and Griffen – arrive by crew cab work trucks.
- As crew levels increase, parking within pay lots/garages will be more prevalent.
- “No Construction Worker Parking” signs have been offered to be posted, and approval to do so is pending.



Work Hours

Normal Hours:

Monday – Friday:	7am to 6pm
Saturday (behind fence):	9am to 6pm
Saturday (in the ROW):	9am to 5pm

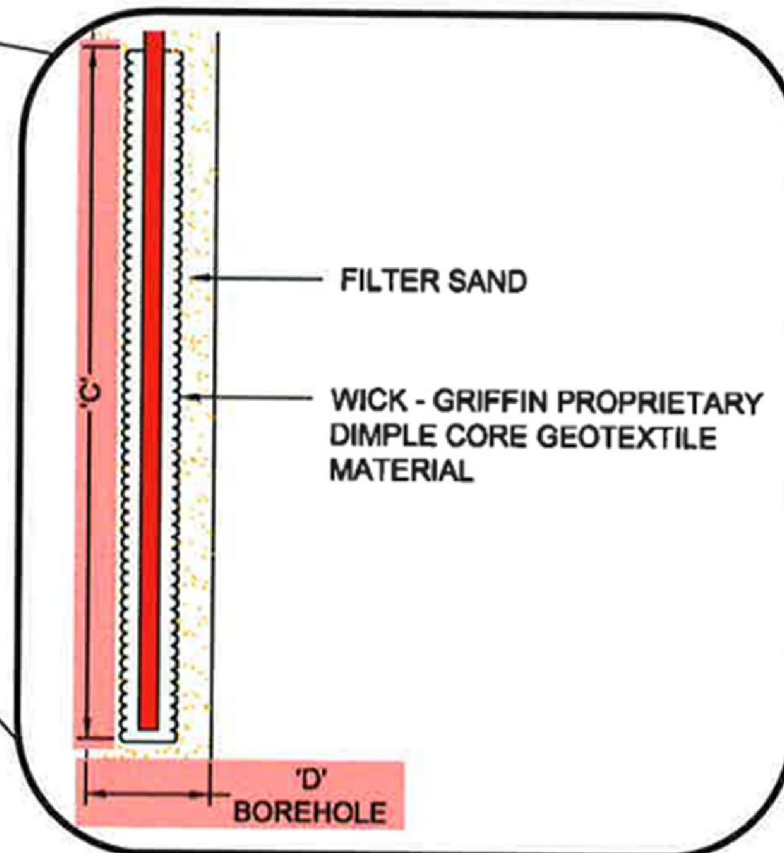
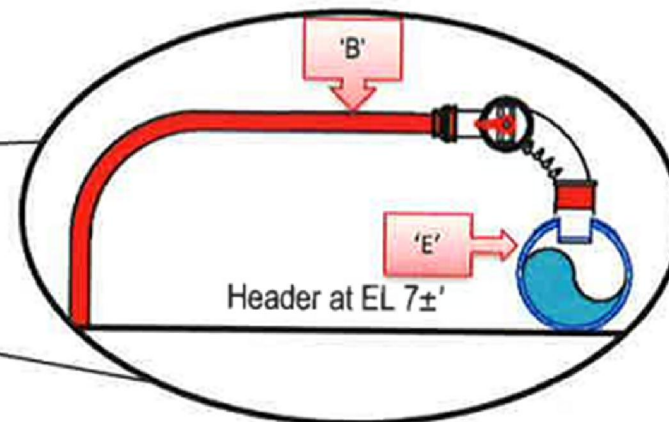
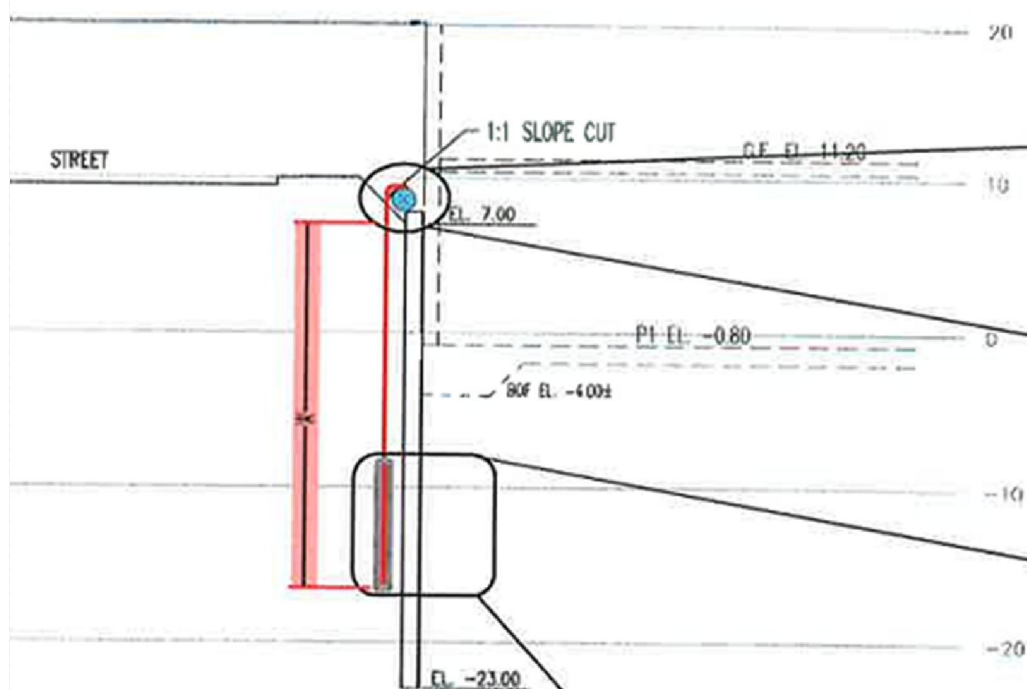
Pile Driving Hours:

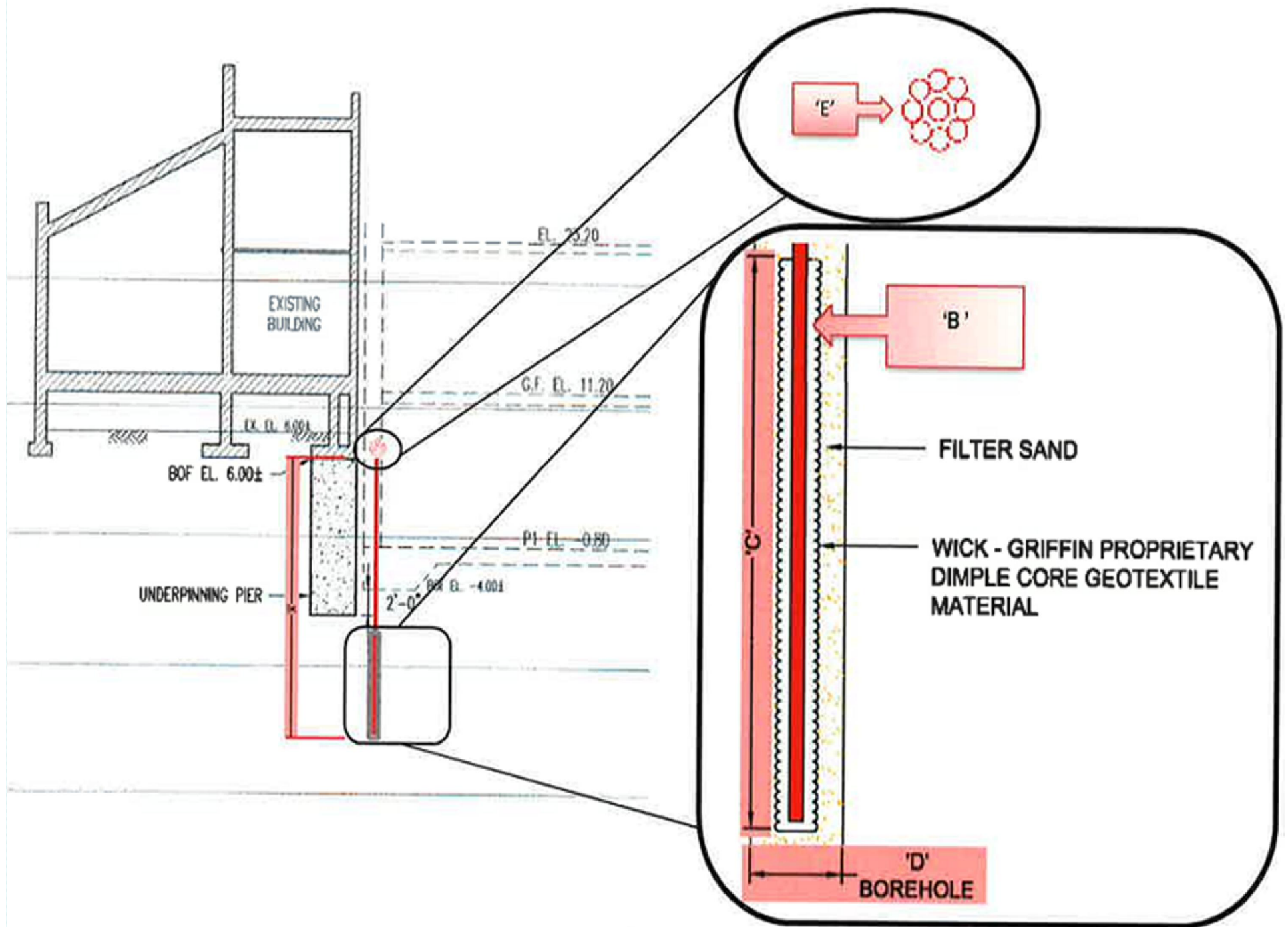
Monday – Friday:	9am to 6pm
Saturday (behind fence):	10am to 4pm



Dewatering Operation

- Specialty Subcontractor: Griffin Dewatering Mid-Atlantic, LLC
- Each system is specially engineered for the individual site.
- Consists of $\frac{3}{4}$ " wick tubes installed at approximately 7' o.c. to depths between 20 and 25 feet deep.
- Wick tubes tie to a 6" header pipe at the full perimeter of the site.
- A continuously running pump draws the groundwater to a depth just below the design subgrade for the building foundations.
- Water is permitted to be discharged to the storm system, but will be discharged to the sanitary system despite clean pre-discharge samples for treatment by Alexandria Renew.
- Settlement Monitoring is maintained for the duration of the dewatering.



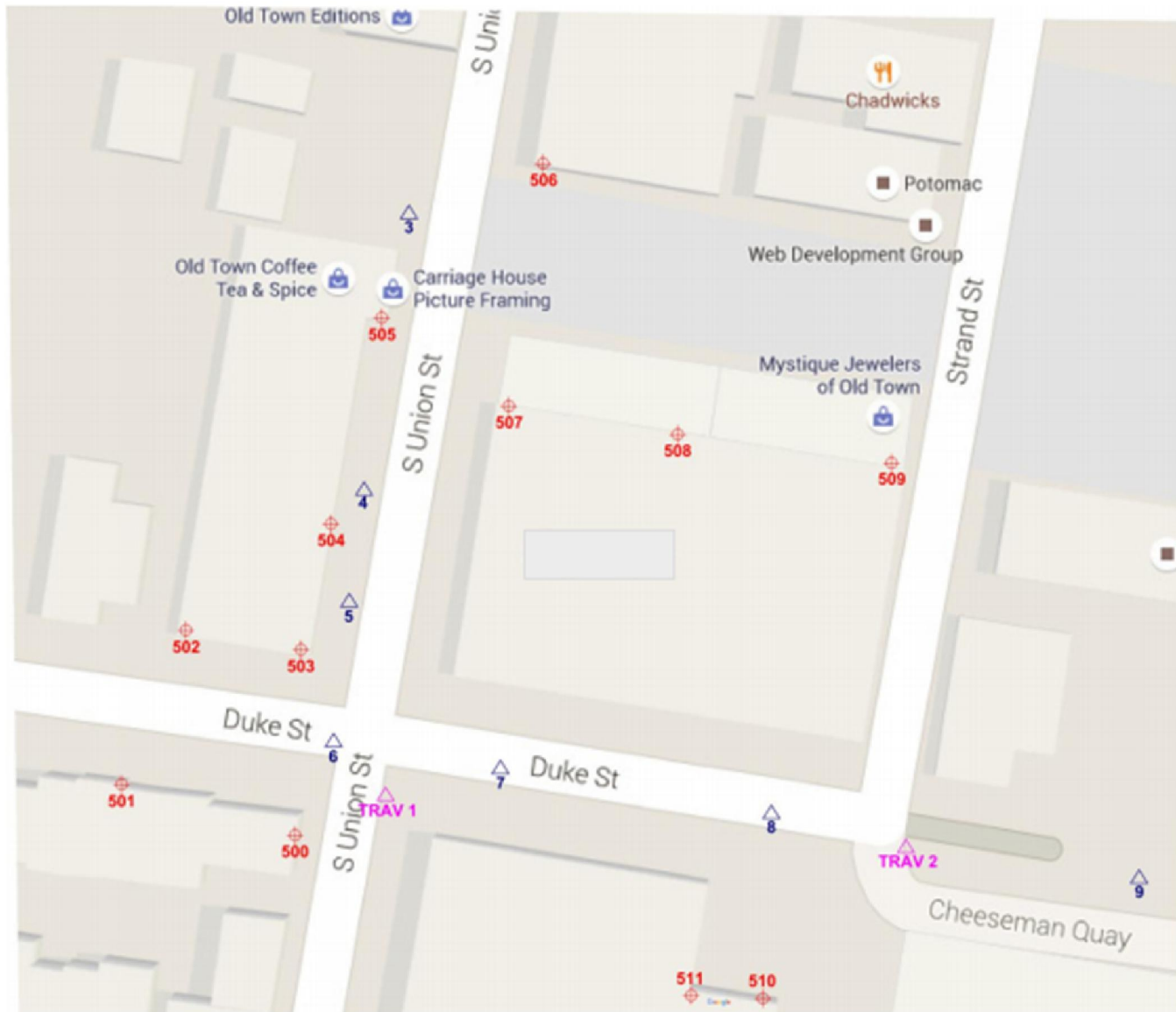




Settlement Monitoring

- Settlement monitoring points have been installed in the vicinity of the site.
- Monitoring will be conducted on six existing buildings near the site.
 - Robinson Terminal (to the South)
 - Private townhomes (Southwest),
 - Parking garage (West),
 - The Carriage House (Northwest),
 - A series of business with a shared building including the Potomac Riverboat Company (North), and
 - The Village on The Strand (211 Strand) series of business
- Monitoring will assess any settlement, displacement or general movement incurred to the existing buildings surrounding the job site.
- Twice weekly monitoring during dewatering draw down. Thereafter, weekly. Action levels are set to a percentage of expected movement.

220 South Union Street
Monitoring Plan & Narrative



Vicinity Map with control, traverse and monitoring points. Locations on the map are approximate.

Vibration Monitoring

- Specialty Consultant: ECS Mid-Atlantic, LLC
- Placement scheduled for the week of 9/14/15
- Seismograph equipment measures vibrations from the site and is downloaded remotely for reporting.
- A threshold trigger is established, and if exceeded, an notice is emailed to the contractor and ECS.
 - Individual instances are not the focus, but exceeding the threshold multiple times leads to a cause for the P.E. to evaluate the methods used.
- Monitoring will be conducted at three properties closest to the site:
 - 211 Strand Street (north)
 - Solo Parking Garage
 - 2 Duke Street (Historic RTS Building)

Archeology

- Consultant: Thunderbird Archeology (a Wetland Studies company)
- Full time monitoring of dirt moving activities beginning with removal of the building slab and installation of E&S.
- Phased excavation with archeological trenching every 4 feet in depth.
- Monitoring of utility trench excavation.
- Scope of work reviewed and approved by Alexandria Archeology.

